

ABSTRACT OF THE DISCLOSURE

The invention relates to a process for mixing a first acidic aqueous solution comprising hydroxylammonium and phosphate with a second acidic aqueous solution comprising nitric acid at a temperature between 20 and 80 °C resulting in a third acidic aqueous solution comprising hydroxylammonium, phosphate and nitric acid, wherein in the third acidic aqueous solution the total acid concentration minus the phosphate concentration is lower than $0.523 * \ln([\text{hydroxylammonium}]/1.25) + 422/(T + 81)$ whereby $[\text{hydroxylammonium}]$ is the concentration of hydroxylammonium in the third acidic aqueous solution, T is the temperature of the third acidic aqueous solution expressed in °C and all concentrations are expressed in mol/l.